

U.S.-China Real Estate Markets in Times of COVID-19

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Abstract: In 2020, the world experienced the COVID-19 pandemic. This has had an extremely serious impact on the global economy. All industries have been greatly affected by such a severe economic situation. This paper assumes that the real estate market, as a part of the economic market, was also greatly affected. The purpose of this paper is to examine the effects that the real estate markets in China and the United States have suffered under this pandemic and to analyze the specific reasons and motivations behind these effects. Using statistical data from 2017 to 2022, this paper compares housing prices and transaction volumes in six major cities in China and the United States. The results of the study show a result contrary to the hypothesis that the real estate markets in China and the United States recovered after a period of recession and were able to reach higher levels than before the epidemic. Based on this result, the paper analyzes the causes of the impact on the real estate markets in China and the United States. There is evidence that the main causes affecting the Chinese real estate market are real estate policies and cultural phenomena, while the factors behind the impact on the U.S. real estate market are economic policies and epidemic management strategies.

Keywords: COVID-19, real estate market, China, United States, policy

1. Introduction

For the world economy and financial markets, disasters, terrorist events, wars and crises can cause severe turmoil. COVID-19 (also known as the novel coronavirus) was the first major global pandemic of the century. Known as SARS-CoV-2, this tiny virus has wreaked havoc in various regions of the world. This virus has created a lot of uncertainty in economic and financial markets. Worldwide, this dramatic increase in uncertainty has led to low economic growth and severe financial instability. Nadia Balemi, Roland Füss and Alois Weigand examine the impact of COVID-19 on the real estate market [1], and Francesca Buglione analyze the response of the real estate market to the COVID-19 crisis [2]. China and the United States, as the world's largest economies, have borne the brunt of the impact. This paper assumes that the Chinese and U.S. real estate markets are affected and remain in recession for an extended period of time. This paper intends to specifically analyze the impact on the real estate markets in China and the U.S. after the pandemic by comparing the house prices and transaction volumes in first-tier cities. The data set covers the period of 2017-2022. For the differences from the hypothesis, this paper makes a specific analysis of the influencing factors and draws conclusions.

2. Comparative Analysis of the Impact of COVID-19 on the Real Estate Market in China and the United States

There is no doubt that COVID-19 is an unprecedented and far-reaching blow to industries around the world. New research from the World Travel and Tourism Council (WTTC) shows the impact of COVID-19 on unemployment rates and GDP. As many as 75 million workers' jobs are at risk under the direct impact of COVID-19. One million tourism jobs will be lost every day under the widespread impact of a coronavirus pandemic. In terms of GDP losses, studies show potential GDP losses in tourism of up to \$2.1 trillion in 2020. [3]

Many households in China and the United States have reduced or already low incomes and cannot afford such heavy financial pressures. Many Americans have seen their incomes plummet due to unemployment. About four in ten Americans say they have spent less than usual since the coronavirus outbreak, so they are less likely to spend much money on a home and should spend more to maintain the basic expenses of normal life. One-third of U.S. adults say they or someone in their household has been laid off or lost their job (including vacations and temporary jobs) since the February 2020 coronavirus outbreak [4]. This severe situation leaves Americans without stable jobs and wages, so purchasing a home in this situation should not be a good option. For China, this problem is even more serious because the income of Chinese people is very low compared to the United States, even before the COVID-19 pandemic. But there is a mismatch between incomes and housing prices. According to the National Bureau of Statistics, home prices in China have more than doubled from 2007 to 2016 [5]. It shows that many people lose their jobs because of COVID-19 and have no stable income due to the lack of stable jobs. Based on this phenomenon, this paper speculates that the real estate market, as part of the financial market, has been affected quite severely and has led to a decline in house prices and a decrease in the number of commercial housing transactions.

For any market, when there is not a surplus, the higher the demand, the higher the price. In the case of the real estate market, demand comes from people who need to buy a home. This article focuses on the top cities in the U.S. and China in terms of population density, specifically New York, Boston, San Francisco, Shanghai, Shenzhen, and Beijing.

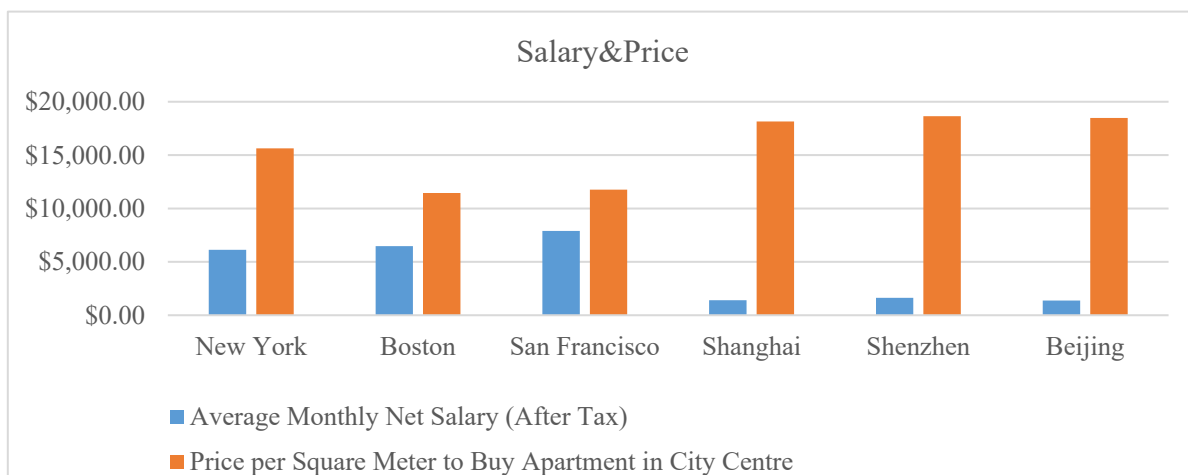


Figure 1: Comparison of salaries and housing prices in 6 Chinese and American cities [6].

Figure 1 shows that in terms of average monthly salary, China is much lower than the U.S. The average monthly salary in New York, Boston, and San Francisco is above \$6000, while the average monthly salary in Shanghai, Shenzhen, and Beijing is less than \$2000. Housing prices show a completely different picture, with the price per square meter for an apartment in downtown China in all three cities being over \$18,000, while Boston and San Francisco are under \$12,000 and New York

is under \$16,000 at the top. Figure 2 visually show that in these large cities, the Chinese have less income but more pressure to buy a home than Americans. As Figure 2 shows, the price to income ratio in Shanghai, Shenzhen, and Beijing is four or even five times higher than in New York, Boston, and San Francisco.

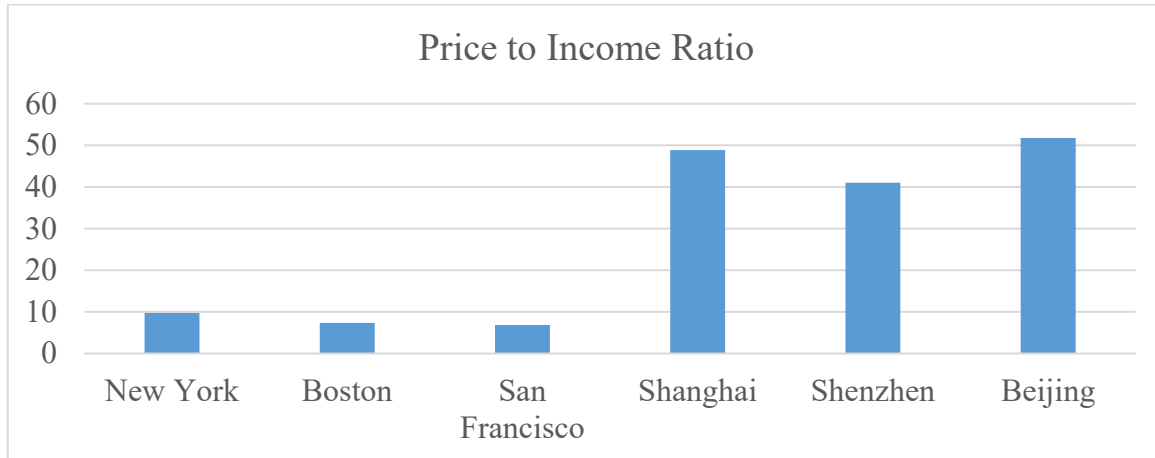


Figure 2: Price to income ratio in 6 Chinese and American cities [6].

New York and Beijing are used here as examples for the U.S. and China to see how COVID-19 changes house prices. Figure 3 shows that New York house prices peaked in June 2019 and experienced a small decline after the outbreak in February 2020. There is another turning point here, where in February 2021, one year after the outbreak, New York house prices resume a more stable growth until June 2022, when they even exceed the June 2019 peak.[7] As figure 4, Beijing's house price trends show a striking similarity to New York's. In July 2019, Beijing's house prices reached a high value, yet experienced a precipitous drop in January-February 2020. Very coincidentally, Beijing's house prices also begin to rise steadily in February 2021 and continue to rise until January 2022, when they stabilize above their high value in 2019 [8]. This trend clearly demonstrates the negative impact of COVID-19 on the real estate market, which has led to a rapid decrease in house prices in representative cities in China and the US. However, such a situation turned around one year after the birth of the epidemic and the typical real estate markets in China and the US started to pick up until now when house prices have reached quite high levels again.

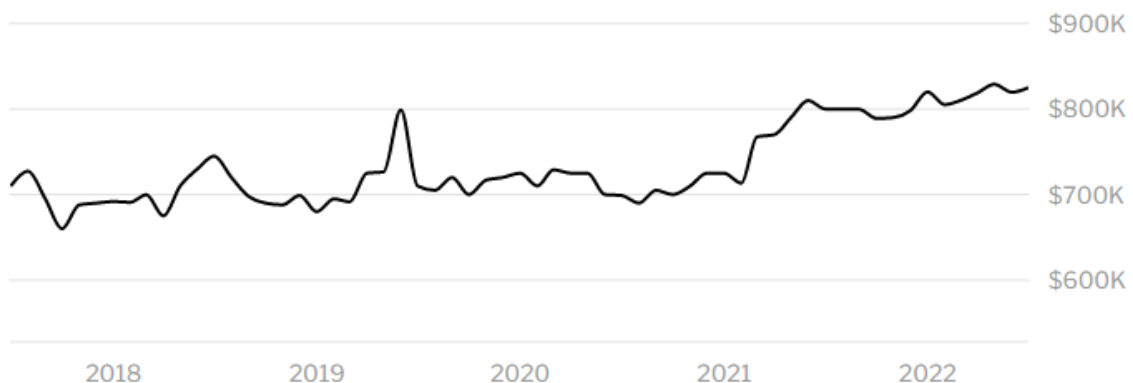


Figure 3: New York housing market trends [7].



Figure 4: Property price: YTD Avg: Beijing [8].

According to a summary of existing home sales data released by NAR, housing market activity fell 4.6 percent in December compared to November 2021, after three consecutive months of growth. Existing home sales in December reached a seasonally adjusted annual rate of 6.18 million. Existing home sales fell 7.1 percent in December compared to the same month in 2020. Existing home sales in 2021 were at an annual rate of 6.12 million, which was the highest level since 2006. This marks a contradiction to speculation that interest in buying a home has only increased despite the severe epidemic. The simultaneous increase in home prices and home sales reflects the fact that the U.S. real estate industry has not suffered a blow, but has recovered and reached new heights in a very short period of time.

In the real estate market in China, there is also no decrease in the volume of commercial housing sales. According to the National Bureau of Statistics of China, in the January-August period of 2021, the sales area of commercial properties was 11.41. 9.3 billion square meters, up 15.9% year-on-year; up 12.1% from January-August 2019, with a two-year average growth of 5.9%. In more detail, residential sales area, office sales area, and commercial business premises sales area all received different degrees of growth. The sales value of commercial properties reached 119.047 billion yuan, an increase of 22.8%; an increase of 24.8% over January-August 2019, with an average growth of 11.7% over the two years [9]. The data shows a steady increase in both home sales area and sales. This proves that the Chinese real estate market has continued to grow at a very respectable pace despite the COVID-19, and that housing sales have not been reduced by lower incomes or higher prices. These data show us that, contrary to what we speculated at the beginning of this paper, the real estate market has not been severely damaged by the new epidemic, but has been developing more steadily.

There are two reasons here that explain why this is happening in China's real estate market. The first is China's unique real estate policy, which is "three red lines" system, a Chinese real estate policy whose main effect is to reduce the size of the financing and increase financing costs. The specific content of "three red lines" is that large real estate firms will be categorized into the green group, orange group, yellow group, and red group according to the three red lines. According to the three criteria of asset-liability ratio less than 70%, net debt ratio less than 100%, cash and short-term debt ratio of at least 1, they are divided into orange group, yellow group and red group[10]. These rules have restrained the development of real estate companies and enabled the entire real estate industry to maintain smooth development even in the face of a serious epidemic. There is another key reason why the demand for real estate in China is difficult to reduce by other factors. In China, owning your own house in a city is the real foundation. In many big cities, if young people want to get married,

they have to own a house by buying it rather than renting it because in the minds of the older generation, only buying a house can give them a sense of stability. This makes it difficult to reduce the demand for housing, and buying a home is a hard necessity rather than an option for many families. The findings suggest that the patriarchal culture of Chinese families may be a reason for the real estate boom in China. Specifically, families with sons are more likely to own a home, own more and larger homes, and acquire homes earlier [11]. These unique cultural phenomena have led to a stable demand in the Chinese real estate market that is difficult to influence.

The U.S. real estate market remains stable for two reasons. The government has introduced policies to encourage the economy and support the unemployed. It includes measures to help the unemployed, such as a \$1,200 per person universal subsidy and an additional \$600 per week in unemployment insurance [12]. Since most Americans are not in the habit of saving, these subsidies give help to those who are unemployed because of COVID-19, so that they can stabilize their lives even during the epidemic and thus keep the whole market order from being disrupted. The second reason is about the epidemic prevention policy. Each state in the U.S. has developed different epidemic prevention plans according to the development of different epidemics. In San Francisco, for example, housing construction was considered an essential service during the lockdown. This ensured that many of the projects under construction could proceed smoothly and be completed on time, thus keeping development costs under control. Overall, this improved the stability of the real estate market during the epidemic and prevented delays from causing a continued decline in prices and transaction volumes. As the epidemic becomes more normalized and the government introduces more epidemic prevention and economic policies, the real estate market will continue to grow.

3. Conclusion

This paper presents a detailed analysis of house prices and transaction volumes in the real estate markets of six large cities in China and the United States to assess the impact of the COVID-19 pandemic on the Chinese and U.S. real estate markets and to explore the major factors affecting the Chinese and U.S. real estate markets. The results of the study show that COVID-19 did not lead to a long-term decline in the real estate market in China and the United States. In the year following the outbreak, the U.S. and Chinese real estate markets experienced a small decline. However, both markets rebounded in the year following the outbreak, with home prices and transactions exceeding those of the pre-outbreak period. This suggests that the Chinese and U.S. real estate markets were different from other markets and did not suffer a huge blow. This paper goes on to examine the reasons why the Chinese and U.S. real estate markets suffered little damage during the epidemic and continued to grow steadily. The main reasons affecting the Chinese real estate market are: 1. China's unique real estate policies, which have reduced the scale of financing and increased the cost of financing, have maintained the stability of the real estate market. 2. China has a cultural phenomenon that is different from other countries in that the patriarchal culture of Chinese families and the place of housing in people's minds determine the demand for housing. This has led to China's real estate market maintaining high transaction volumes and high housing prices despite the epidemic shock. The main reasons affecting the U.S. real estate market are: 1. government funding to encourage the economy and provide assistance to the unemployed, which facilitates people to have more stable income and subsidies during COVID-19. With this assistance, people will have a need for housing once their food needs are met. 2. the government has different epidemic prevention programs in different areas. This ensured that many housing projects were completed successfully, which reduced the expenditure on materials and labor. Without these extra expenses, the real estate market can then grow more smoothly.

The phenomenon that contradicts the hypothesis of this paper illustrates the peculiarities of the Chinese and American real estate markets, which need to be studied and understood by each market

today in the midst of the COVID-19 pandemic in order to maintain sustained and stable development during serious risks such as the COVID-19 crisis. Future research will focus on adding more data, such as house prices in non-commercial areas or non-downtown areas, and the rental market should also be considered for the real estate market.

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